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REMARKS

The following remarks are submitted to highlight key points of distinction in the claims from the cited prior art. This response is submitted to be fully responsive to the Final Official Action dated February 19, 2004. It is further submitted that this response is timely filed within the three-month shortened statutory period. Accordingly, no fee is deemed necessary for the filing of this response. Should additional fees be required, the Commissioner is authorized to charge Kagan Binder Deposit Account No. 50-1775 and thereafter notify us of the same. Reconsideration of all outstanding grounds of the rejection and allowance of the subject application are believed in order and respectfully requested.

Claims 27, 29, 30, 32, and 33 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,577,552 to Ebinuma et al. in view of JP 62-74112 or Moen or JP 4-371751 or JP 62-237248 or JP 61-27444. Applicants respectfully submit that these rejections are improper for at least the reasons set forth below.

The present invention as claimed provides control of the temperature of the workstation by means of changing the temperature or flow characteristic of the liquid medium flowing through the workstation. The actual temperature of the recirculated coolant is not monitored for temperature control at the workstation. The fluid medium of the claimed process, in order to rapidly cool the workstation, would be at a temperature significantly different ($> 1.0^{\circ}\text{C}$) than the workstation. If the workstation is significantly above the set point, a valve is opened to provide higher flow through the workstation by bypassing the heater and its flow restricting orifice (Fig 1, see 34 and 36, text Col 3 43 – 49.) The higher liquid medium flow at lower temperature rapidly removes heat from the workstation.

Ebinuma does not contemplate that the fluid medium would be at a temperature significantly different ($> 1.0^{\circ}\text{C}$) than the workstation. It is precisely by the relatively large difference in temperature of the liquid medium and the workstation that the rapid transient response is achieved. If the temperature of the workstation were only slightly above set point as in Ebinuma, the temperature modulation as described in Ebinuma would only slightly reduce the temperature of the liquid medium flowing through the workstation and would approach the set point asymptotically.

The Official Action submits that Ebinuma teaches the need for feedback control for a variable heat load condition, and this is true. But Ebinuma does not teach the advantages of having the recirculated coolant at a significantly lower temperature than the workstation set point to allow for rapid control of large variations in the workstation's temperature or for

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intended flow variations to maintain the workstation's temperature and does not recognize the advantages of the system as presently claimed.

Applicants further submit that the combination of references as proposed by the Official Action is improper. The Official Action asserts that Moen or JP 62-74112 or JP 4-371751 or JP 62-237248 or JP 61-27444 each show some type of bypass that could be combined with Ebinuma to arrive at the presently claimed invention.

These references describe the use of flow bypass valves for the purpose of controlling the temperature of water at a faucet. In the references, the feature that is temperature controlled is the liquid medium, and not a workstation. This system is also intended to control variations in the supply side of a non recirculated liquid medium, not introduced temperature variations from a workstation using recirculated liquid medium.

Applicants therefore submit that the rejection of claims 27, 29, 30, 32, and 33 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,577,552 to Ebinuma et al. in view of U.S. Patent No. 4,386,650 to Moen or JP 62-74112 or JP 4-371751 or JP 62-237248 or JP 61-27444 is improper for at least the reasons discussed above. Applicants respectfully request withdrawal of the rejection.

In view of the above remarks, it is respectfully submitted that the claims and the present application are now in condition for allowance, which allowance is earnestly solicited. In the event that a phone conference between the Examiner and the Applicant's undersigned attorney would help resolve any remaining issues in the application, the Examiner is invited to contact the undersigned as set out below.

Dated: May 19, 2004

Respectfully Submitted,

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DAB/12836